

# Cisco TelePresence Codec C60





Also available as an integrator package with a Cisco TelePresence PrecisionHD<sup>™</sup> 1080p Camera and one microphone.

The Cisco TelePresence<sup>™</sup> portfolio creates an immersive, face-to-face experience over the network—empowering you to collaborate with others like never before. Through a powerful combination of technologies and design that allows you and remote participants to feel as if you are all in the same room, the Cisco TelePresence portfolio has the potential to provide great productivity benefits and transform your business. Many organizations are already using it to control costs, make decisions faster, improve customer intimacy, scale scarce resources, and speed products to market.

#### **Product Overview**

The Cisco TelePresence Codec C60 is the 1080p HD video collaboration engine. Designed with the integrator in mind, the C60 provides the flexibility to incorporate HD video and collaboration into many more team-based applications. Integrate into meeting rooms, boardrooms and special industry projects simply and easily.

#### Cisco TelePresence Codec C60 Features

Table 1 summarizes the key features for the Cisco TelePresence Codec C60.

Table 1. Cisco TelePresence Codec C60 Feature Summary

| Feature Summary      |  |  |
|----------------------|--|--|
| Design Features      | The next generation HD video collaboration codec  1U high, rack-mountable, with rack-mounting solution included Professional-grade connectors Unmatched quality and flexibility Standards-compliant 1080p solution—compatible with standards-based video without losing features   |  |
| Application Features | <ul> <li>720p30 HD embedded Cisco TelePresence MultiSite (MultiSite) with individual transcoding</li> <li>Collaborate with 3 simultaneous video inputs</li> <li>HD Collaboration with 1080p30 and UXGA<sup>*</sup></li> <li>Limitless integration possibilities</li> <li>Ideal for team-based collaboration, boardrooms, meeting rooms and industry applications</li> <li>7 video compositors (embedded)</li> </ul>  |  |
| Performance Features | Optimal definition up to 1080p     H.323/SIP up to 6 Mbps point-to-point     Up to 10 Mbps total MultiSite bandwidth     Connect up to 5 HD sources and 4 microphones directly into the interface     Full duplex audio with high-quality stereo sound     Full APIs     Takes advantage of Cisco® TelePresence Total Solution Management, transcoded HD MultiSite, recording and streaming, Cisco TelePresence Multiway technology (Multiway), and firewall traversal     Utilizes ClearPath packet loss protection technology for optimal experience |  |

# **Product Capabilities**

Table 2 provides a listing of the product capability specifications for the Cisco TelePresence Codec C60.

 Table 2.
 Product Specifications

| Specification                           | Description  |
|---|--|
| Unit Delivered Complete With:           | Videoconferencing codec, wireless remote control, rackmounting rails, LAN cable, power cable |
| Bandwidth                               | H.323/SIP up to 6 Mbps point-to-point  |
|   | Up to 10 Mbps total MultiSite bandwidth  |
| Firewall Traversal                      | Cisco TelePresence Expressway technology   |
|   | • H.460.18 H.460.19 Firewall Traversal   |
| Video Standards                         | • H.261, H.263, H.263+, H.264  |
|   |  |
| Video Features                          | <ul> <li>Native 16:9 Widescreen</li> <li>Advanced Screen Layouts</li> </ul>                  |
|   | Intelligent Video Management   |
|   | Local Auto Layout  |
|   | • 7 embedded individual video compositors — 1 for every output and 1 for every encoder       |
| Video Inputs (5 Inputs)                 | 2 X HDMI Inputs, Supported Formats:  |
| , | • 1920 x 1080@60, 59.94 Hz (1080p60)   |
|   | • 1920 x 1080@50 Hz (1080p50)  |
|   | • 1920 x 1080@30, 29.97 Hz (1080p30)   |
|   | • 1920 x 1080@25 Hz (1080p25)  |
|   | • 1920 x 1080@24, 23.97 Hz (1080p24)   |
|   | • 1280 x 720@60, 59.94 Hz (720p60)   |
|   | • 1280 x 720@50 Hz (720p50)  |
|   | • 720 x 480@60, 59.94 Hz (480p60)  |
|   | • 640 x 480@60 Hz (480p60)   |
|   | • 1600 x 1200@50, 60 Hz (UXGA)   |
|   | • 1280 x 1024@60, 75 Hz (SXGA)   |
|   | • 1024 x 768@60, 70, 75, 85 Hz (XGA)   |
|   | • 800 x 600@56, 60, 72, 75, 85 Hz (SVGA)   |
|   | • 1920 x 1200@50, 60 Hz (WUXGA)  |
|   | • 1680 x 1050@60 Hz (WSXGA+)   |
|   | • 1440 X 900@60 Hz (WXGA+)   |
|   | • 1280 x 768@60 Hz (WXGA)  2 X DVI-I Inputs, Supported Formats:                              |
|   | Analog (VGA):  |
|   | ● 1920 x 1080@60 Hz (1080p)  |
|   | • 1280 x 720@60 Hz (720p)  |
|   | • 1600 x 1200@60 Hz (UXGA)   |
|   | • 1280 x 1024@60, 75 Hz (SXGA)   |
|   | • 1280 x 960@60 Hz   |
|   | • 1024 x 768@60, 70, 75, 85 Hz (XGA)   |
|   | • 1920 x 1200@50 Hz (WUXGA)  |
|   | • 1680 x 1050@60 Hz (WSXGA+)   |
|   | • 1440 x 900@60 Hz (WXGA+)   |
|   | • 1280 x 800@60 Hz (WXGA)  |
|   | • 1280 x 768@60 Hz (WXGA)  |
|   | Analog (YPbPr):  |
|   | • 1920 x 1080@60 Hz (1080p60)  |
|   | • 1920 x 1080@50 Hz (1080p50)  |
|   | • 1920 x 1080@30 Hz (1080p30)  |
|   | • 1920 x 1080@25 Hz (1080p25)<br>• 1380 x 730@60 Hz (730p60)                                 |
|   | • 1280 x 720@60 Hz (720p60)  |
|   | • 1280 x 720@50 Hz (720p50)  |
|   | ● 1280 x 720@30 Hz (720p30)<br>● 720 x 576@50 Hz (576p50)                                    |
|   | ● 720 x 480@60 Hz (w480p60)  |
|   | Digital (DVI-D):   |
|   | Digital (DVI D).   |

| Specification             | Description   |
|---------------------------|---|
|                           | • 1920 x 1080@60, 59.94 Hz (1080p60)  |
|                           | • 1920 x 1080@50 Hz (1080p50)   |
|                           | • 1920 x 1080@30, 29.97 Hz (1080p30)  |
|                           | • 1920 x 1080@25 Hz (1080p25)   |
|                           | • 1920 x 1080@24, 23.97 Hz (1080p24)  |
|                           | • 1280 x 720@60, 59.94 Hz (720p60)  |
|                           | • 1280 x 720@50 Hz (720p50)   |
|                           | • 720 x 480@60, 59.94 Hz (480p60)   |
|                           | • 640 x 480@60 Hz (480p60)  |
|                           | • 1600 x 1200@50, 60 Hz (UXGA)  |
|                           | • 1280 x 1024@60, 75 Hz (SXGA)  |
|                           | • 1024 x 768@60, 70, 75, 85 Hz (XGA)  |
|                           | • 800 x 600@56, 60, 72, 75, 85 Hz (SVGA)  |
|                           | • 1920 x 1200@50, 60 Hz (WUXGA)   |
|                           | • 1680 x 1050@60 Hz (WSXGA+)  |
|                           | • 1440 X 900@60 Hz (WXGA+)  |
|                           | • 1280 x 768@60 Hz (WXGA)   |
|                           | 1 X Composite Input (BNC Connectors)  |
|                           | • PAL/NTSC  |
|                           | Extended Display Identification Data (EDID)   |
| Video Outputs (3 Outputs) | 1 X HDMI Output, 1 X DVI-I Output, Supported Formats:   |
|                           | • 1920 x 1080@60 Hz (1080p60)   |
|                           | • 1280 x 720@60 Hz (720p60)   |
|                           | • 1600 x 1200@60 Hz (UXGA)  |
|                           | • 1280 x 1024@60 Hz (SXGA)  |
|                           | • 1024 x 768@60 Hz (XGA)  |
|                           | • 800 x 600@60 Hz (SVGA)  |
|                           | • 640 x 480@60 Hz (VGA)   |
|                           | • 1920 x 1200@60Hz (WUXGA)  |
|                           | • 1360 x 768@60 Hz  |
|                           | • 1366 x 768@60 Hz  |
|                           | • 1280 x 768@60 Hz (WXGA)   |
|                           | 1 X Composite Output (BNC Connector), Supported Formats:  |
|                           | • PAL/NTSC  |
|                           | VESA Monitor Power Management Extended Display Identification Data (EDID)   |
| Live Video Resolutions    | • 176 x 144@30 fps (QCIF)   |
| (Encode/Decode)           | • 352 x 288@30 fps (CIF)  |
|                           | • 512 x 288@30 fps (w288p)  |
|                           | • 576 x 448@30 fps (448p)   |
|                           | • 768 x 448@30 fps (w448p)  |
|                           | • 704 x 576@30 fps (4CIF)   |
|                           | • 1024 x 576@30 fps (w576p)   |
|                           | • 1280 x 720@30 fps (720p30)  |
|                           | • 1920 x 1080@30 fps (1080p30)*   |
|                           | • 640 x 480@30 fps (VGA)  |
|                           | • 800 x 600@30 fps (SVGA)   |
|                           |   |
|                           | • 1024 x 768@30 fps (XGA)   |
|                           |   |
|                           | • 1280 x 1024@30 fps (SXGA)   |
|                           | <ul><li>1280 x 1024@30 fps (SXGA)</li><li>1280 x 768@30 fps (WXGA)</li></ul>  |
|                           | <ul> <li>1280 x 1024@30 fps (SXGA)</li> <li>1280 x 768@30 fps (WXGA)</li> <li>1440 x 900@30 fps (WXGA+)</li> </ul>  |
|                           | <ul> <li>1280 x 1024@30 fps (SXGA)</li> <li>1280 x 768@30 fps (WXGA)</li> <li>1440 x 900@30 fps (WXGA+)</li> <li>1680 x 1050@30 fps (WSXGA+)</li> </ul>   |
|                           | <ul> <li>1280 x 1024@30 fps (SXGA)</li> <li>1280 x 768@30 fps (WXGA)</li> <li>1440 x 900@30 fps (WXGA+)</li> <li>1680 x 1050@30 fps (WSXGA+)</li> <li>1600 x 1200@30 fps (UXGA)</li> </ul>  |
|                           | <ul> <li>1280 x 1024@30 fps (SXGA)</li> <li>1280 x 768@30 fps (WXGA)</li> <li>1440 x 900@30 fps (WXGA+)</li> <li>1680 x 1050@30 fps (WSXGA+)</li> <li>1600 x 1200@30 fps (UXGA)</li> <li>1920 x 1200@25 fps (WUXGA)</li> </ul>  |
|                           | <ul> <li>1280 x 1024@30 fps (SXGA)</li> <li>1280 x 768@30 fps (WXGA)</li> <li>1440 x 900@30 fps (WXGA+)</li> <li>1680 x 1050@30 fps (WSXGA+)</li> <li>1600 x 1200@30 fps (UXGA)</li> </ul>  |
|                           | <ul> <li>1280 x 1024@30 fps (SXGA)</li> <li>1280 x 768@30 fps (WXGA)</li> <li>1440 x 900@30 fps (WXGA+)</li> <li>1680 x 1050@30 fps (WSXGA+)</li> <li>1600 x 1200@30 fps (UXGA)</li> <li>1920 x 1200@25 fps (WUXGA)</li> </ul>  |
|                           | <ul> <li>1280 x 1024@30 fps (SXGA)</li> <li>1280 x 768@30 fps (WXGA)</li> <li>1440 x 900@30 fps (WXGA+)</li> <li>1680 x 1050@30 fps (WSXGA+)</li> <li>1600 x 1200@30 fps (UXGA)</li> <li>1920 x 1200@25 fps (WUXGA)</li> <li>512 x 288@60 fps (w288p60)</li> </ul>  |
|                           | <ul> <li>1280 x 1024@30 fps (SXGA)</li> <li>1280 x 768@30 fps (WXGA)</li> <li>1440 x 900@30 fps (WXGA+)</li> <li>1680 x 1050@30 fps (WSXGA+)</li> <li>1600 x 1200@30 fps (UXGA)</li> <li>1920 x 1200@25 fps (WUXGA)</li> <li>512 x 288@60 fps (w288p60)</li> <li>768 x 448@60 fps (w448p60)</li> </ul>                                      |
|                           | <ul> <li>1280 x 1024@30 fps (SXGA)</li> <li>1280 x 768@30 fps (WXGA)</li> <li>1440 x 900@30 fps (WXGA+)</li> <li>1680 x 1050@30 fps (WSXGA+)</li> <li>1600 x 1200@30 fps (UXGA)</li> <li>1920 x 1200@25 fps (WUXGA)</li> <li>512 x 288@60 fps (w288p60)</li> <li>768 x 448@60 fps (w448p60)</li> <li>1024 x 576@60 fps (w576p60)</li> </ul> |

| Specification             | Description   |
|---------------------------|---|
|                           | • 1080p30 from 1472kpbs   |
| Audio Standards           | G.711, G.722, G.722.1,64 kbps & 128 kbps MPEG4 AAC-LD, AAC-LD Stereo  |
| Audio Features            | CD-Quality 20KHz Mono and Stereo  Four separate acoustic echo cancellers  4-port Audio mixer  Automatic Gain Control (AGC)  Automatic Noise Reduction  Active lip synchronization   |
| Audio Inputs (7 Inputs)   | <ul> <li>4 x microphone, 48V phantom powered, XLR connector each with separate echo cancellers and noise reduction, all microphones can be set for balanced line level</li> <li>2 x RCA/Phono, Line Level: Stereo PC input, configurable to 2 x RCA/Phono, Line Level: Mono auxiliary/DVD input</li> <li>1 x HDMI, digital: Stereo PC/DVD inputs</li> </ul>   |
| Audio Outputs (3 Outputs) | <ul> <li>2 x RCA/Phono, line level, stereo main audio, configurable to S/PDIF or 2 x RCA/Phono, line level, mono to recording device</li> <li>1 x HDMI, digital, stereo main audio</li> </ul>   |
| Dual Stream               | <ul> <li>H.239 (H.323) dual stream</li> <li>BFCP (SIP) dual stream</li> <li>Support for resolutions up to 1080p30/WUXGA, independent of main stream resolution</li> </ul>   |
| Multisite Features        | 4-way 720p30 High Definition SIP/H.323 MultiSite     Full individual audio and video transcoding     Individual layouts in MultiSite CP (Takes out self view)     H.323/SIP/VoIP in the same conference     Support for Presentation (H.239/BFCP) from any participant at resolutions up to WXGAp30     Best Impression (Automatic CP Layouts)     H.264, Encryption, Dual Stream from any site     IP Downspeeding     Dial in/Dial out     Additional telephone call (no license required)     Conference rates up to 10 Mbps |
| Protocols                 | • H.323<br>• SIP  |
| Embedded Encryption       | H.323/SIP point-to-point  Standards-based: H.235 v2 & v3 and AES  Automatic key generation and exchange  Supported in Dual Stream   |
| IP Network Features       | DNS lookup for service configuration Differentiated Services (QoS) IP adaptive bandwidth management (including flow control) Auto gatekeeper discovery Dynamic playout and lip-sync buffering H.245 DTMF tones in H.323 Date and Time support via NTP Packet Loss based Downspeeding URI Dialing TCP/IP DHCP 802.1x Network authentication ClearPath  |
| IPv6 Network Support      | <ul> <li>Single call stack support for both H323 and SIP</li> <li>Dual-stack IPv4 and IPv6 for DHCP, SSH, HTTP, HTTPS, DNS, DiffServ</li> <li>Support for both Static and Autoconfig (stateless address auto config)</li> </ul>   |
| Security Features         | Management via HTTPS and SSH     IP Administration Password     Menu Administration Password     Disable IP services     Network Settings protection  |

| Specification                                     | Description  |
|---|--|
| Network Interfaces                                | • 1 x LAN/Ethernet (RJ-45) 10/100/1000 Mbit  |
| Other Interfaces                                  | USB host for future usage USB device for future usage GPIO   |
| Cisco TelePresence Precision HD<br>Camera (1080p) | <ul> <li>1/3" CMOS</li> <li>12 x zoom</li> <li>+15°/-25° tilt, +/- 90° pan</li> <li>43.5° vertical field of view</li> <li>72° horizontal field of view</li> <li>Focus distance 0.3m-infinity</li> <li>1920 x 1080 pixels progressive @ 60fps</li> <li>Other formats supported (configurable through Dip-switch): <ul> <li>1920x1080@60fps (HDMI only)</li> <li>1920x1080@50fps (HDMI only)</li> <li>1920x1080@30fps</li> <li>1920x1080@25fps</li> <li>1920x1080@25fps</li> <li>1280x720@60fps</li> <li>1280x720@50fps</li> <li>1280x720@30fps</li> <li>1280x720@25fps</li> </ul> </li> <li>Automatic or manual focus/brightness/white balance</li> <li>Far-end camera control</li> <li>Daisy-chain support (Visca protocol camera)</li> <li>Dual HDMI and HD-SDI output</li> </ul> |
| System Management                                 | Upside-down mounting with automatic flipping of picture      Support for the Cisco TelePresence Management Suite     Total management via embedded SNMP, Telnet, SSH, XML, SOAP     Remote software upload: via web server, SCP, HTTP, HTTPS     1 x RS-232 for local control and diagnostics     Remote control and on-screen menu system   |
| Directory Services                                | Support for Local directories (My Contacts)  Corporate Directory  Unlimited entries using Server directory supporting  LDAP and H.350  Unlimited number for Corporate directory (through Cisco TelePresence Management Suite)  200 number local directory  Received Calls  Placed Calls  Missed Calls with Date and Time   |
| Power   | Auto-sensing power supply     100–240 VAC, 50/60 Hz     175 watts max. for codec and main camera   |
| Operating Temperature and Humidity                | 0° C to 35° C (32° F to 95° F) ambient temperature     10% to 90% Relative Humidity (RH)   |
| Storage and Transport Temperature                 | • -20° C to 60° C (-4° F to 140° F) at RH 10–90% (non-condensing)  |
| Dimensions  | <ul> <li>Length: 17.4"/44.2 cm</li> <li>Height: 1.7"/4.4 cm</li> <li>Depth: 10.9"/27.8 cm</li> <li>Weight: 8.8 lbs/4 kg</li> </ul>   |

<sup>\*</sup>Requires option \*\*Multiwindow compositing not supported on the dual stream

## **Regulatory Compliance**

- Directive 2006/95/EC (Low-Voltage Directive) Standard EN 60950-1
- Directive 2004/108/EC (EMC Directive) Standard EN 55022, Class B Standard EN 55024 Standard EN 61000-3-2/-3-3
- Approved according to UL 60950-1 and CSA 60950-1-07
- · Complies with FCC15B Class B

### **Ordering Information**

To place an order, please contact your Cisco sales representative.

### Service and Support

Cisco and our partners provide a broad portfolio of intelligent, personalized services and support that can help you realize the full value of your Cisco TelePresence investment by increasing business agility and network availability. This portfolio of services accelerates business innovation through a network-based collaboration platform that enables businesses to collaborate anywhere, anytime. For more information about these services, visit: <a href="http://www.cisco.com/go/telepresenceservices">http://www.cisco.com/go/telepresenceservices</a>.

#### For More Information

For more information about the Cisco TelePresence Codec C60, visit <a href="http://www.cisco.com/go/telepresence">http://www.cisco.com/go/telepresence</a> or contact your local Cisco account representative or authorized Cisco partner. Product specifications are estimates and subject to change without notice.



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Printed in USA C78-628595-00 12/10